



Advocates for Rural Broadband

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Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

**RE: *Connect America Fund*, WC Docket No. 10-90**

Dear Ms. Dortch:

On Tuesday May 7, 2019, Deborah Rand and David Shipley of US Connect (Colorado, Texas, Kansas, Nebraska and Georgia); John Lundgren of Volcano Communications Group (California); Eric Votaw and Jennifer Vellucci of Varcomm Holdings (California); Kent Schimke of Dickey Rural Networks (North Dakota); Pat McElroy of Northeast Nebraska Telephone Company (Nebraska); and Derrick Owens, Bill Durdach and Gerry Duffy representing WTA – Advocates for Rural Broadband (“WTA”) met with Commissioner Michael O’Rielly (who could not stay for the entire meeting) and with Arielle Roth, his Wireline Legal Advisor, to discuss various Universal Service matters, particularly performance testing requirements for Rate of Return local exchange carrier (“RoR LEC”) recipients of high-cost support.

WTA and its members expressed their appreciation for the recently issued Alternative Connect America Cost Model II (“ACAM II”) offers. With one possible exception, the participating WTA members indicated their intentions to accept their ACAM II offers, and stated that the certainty and stability of their future ACAM II support would allow them to finance and deploy substantial additional broadband facilities and services.

WTA and its members reiterated that they support the testing of their networks and other networks receiving high-cost support to ensure that such support is being used for the intended purposes. WTA noted that the initial performance testing rules appear to have been designed predominately with the large price cap carriers in mind, and that its efforts have been directed primarily toward obtaining modifications or alternatives that better address the resources and circumstances of RoR LECs and other smaller high-cost support recipients.

WTA reported that it has had several recent lengthy discussions with the Commission’s staff regarding the details of performance testing. In the present meeting, it focused upon two broader issues: (a) the appropriate broadband facilities and route to be tested; and (b) the availability, cost and practicability of the performance testing equipment and software that is being developed.

WTA noted that there is some incoherence between the two primary goals of performance testing: (1) to determine whether customers are getting the broadband speeds and latency that they have been promised (“the customer satisfaction goal”); and (2) to determine whether high-cost support recipients

have complied with their broadband build-out obligations (“the high-cost compliance goal”). WTA members have been constructing their networks to meet the applicable broadband build-out obligation speeds or better, and WTA is confident that virtually all network-only testing by its members can pass the high-cost compliance goal and show that received support was used for the intended purposes. However, WTA members worry that testing beyond the boundaries of their broadband networks – both inside customer premises where a variety of equipment has been selected and deployed by customers and between their networks and Internet exchange points (“IXPs”) over middle mile transport facilities and routes operated by one or more unrelated entities – can result in test “failures” that they have no ability to control or repair but which can result in the loss or withholding of critically needed high-cost support.

Few RoR LECs control the middle mile carriers and facilities that connect their networks to an IXP. Some have a choice among middle mile carriers at their initial hand-off point, but have no further control over how their initial middle mile carrier routes and handles their traffic, including handing it off to one or more additional carriers before it reaches an IXP. Others have no choice even regarding their initial middle mile carrier, much less how it routes and transfers their traffic. Mr. Votaw, for example, described how the broadband traffic of one of his company’s exchanges must traverse four microwave hops down a mountain, and then travel over 100 miles of fiber operated by unrelated companies to the nearest IXP. Mr. McElroy showed how his company has to route its broadband traffic through three separate and unrelated middle mile carriers before it reaches the Internet. WTA members have reasonable concerns that a host of potential middle mile problems and disruptions – including, but not limited to, increased congestion, unanticipated routing changes, line breaks, and scheduled and unscheduled maintenance – over which they have no notice or control can adversely impact their performance test results.

RoR LECs also have virtually no control over customer Internet gateways, routers, modems and other inside wiring facilities beyond the network interface devices (“NIDs”) and optical network terminals (“ONTs”) that constitute the ends of their regulated and controlled networks. The WTA members reported that many of their rural customers have purchased their own customer premises equipment (“CPE”) which may be of poor or deteriorated quality and which may be incompatible with performance testing equipment. They also predicted, from experience, that a significant number of rural customers are likely to refuse to buy or accept upgraded equipment or to allow RoR LEC personnel into their homes to install it. Ms. Rand noted that about 80 percent of her company’s service complaints are determined after investigation to be caused by customer equipment problems.

WTA has proposed a couple of alternatives to avoid the imposition of inequitable penalties upon RoR LECs for performance testing failures due to middle mile and/or CPE problems over which they have no control, and to which their high-cost support bears little or no relation. These alternatives included separate customer satisfaction and high-cost compliance tests, or dividing the four weeks of required seasonal testing into two weeks of customer satisfaction testing and two weeks of high-cost compliance testing. Whatever the solution, critically needed high-cost support should not be withheld or taken away due to test “failures” caused by middle mile and/or CPE problems which RoR LECs have no ability to control or repair.

The WTA members have heard vendor presentations that new testing equipment is ready or almost ready, but have not seen much available and affordable equipment yet. One WTA member reported that his company had participated in substantial negotiations with a vendor, but had found that its

equipment prices and monthly license fees were far too high to be recovered in affordable broadband service rates, and that the company was now talking with a second vendor but was unsure when its testing equipment would ultimately be available. The WTA members noted that some testing equipment vendors appear to be working on software solutions that would be incorporated into Internet gateways. However, as noted above, they have concerns that their rural customers will refuse to purchase such new equipment, or even accept it if offered to them as a free upgrade.

WTA notes that the CPE problem could be reduced, in significant part, by providing or requiring the customer to purchase an Internet gateway with appropriate incorporated testing software at the time of each new broadband service initiation or upgrade. This would allow performance testing of new and upgraded customers after they were added, but it would likely take several years before testing issues with respect to uncooperative existing customers could be resolved or minimized. Automated testing through Internet gateway software would also need Commission determinations whether such performance testing required express customer consent and whether it implicated Customer Proprietary Network Information ("CPNI") or other privacy concerns.

Pursuant to Section 1.1206(b) of the Commission's Rules, this submission is being filed for inclusion in the public record of the referenced proceeding.

Respectfully submitted,  
/s/ Gerard J. Duffy  
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Attachments