



Melissa E. Newman
Vice President – Federal Regulatory Affairs
1099 New York Avenue NW
Suite 250
Washington, DC 20001
202.429.3120

EX PARTE

March 30, 2012

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

Re: *Connect America Fund, WC Docket 10-90; A National Broadband Plan for Our Future, GN Docket 09-51; Establishing Just and Reasonable Rates for Local Exchange Carriers, WC Docket 07-135; High-Cost Universal Service Support, WC Docket 05-337; Developing an Unified Intercarrier Compensation Regime, CC Docket 01-92; Federal-State Joint Board on Universal Service, CC Docket 96-45; Lifeline and Link-Up, WC Docket 03-109; Universal Service Reform – Mobility Fund, WT Docket 10-208*

Dear Ms. Dortch:

On March 28, 2102, Jeff Lanning and Melissa Newman of CenturyLink, Jennie Chandra of Windstream, Michael Saperstein of Frontier and Micah Caldwell of the Independent Telephone and Telecommunications Alliance (ITTA) met with Carol Matthey, Joseph Cavender, Amy Bender and Patrick Halley to discuss the above-proceedings.

On March 6, 2012, CenturyLink, Frontier, Windstream and ITTA filed a proposal (the March 6 Proposal) to address specified shortcomings in the current rules for Connect America Fund (CAF) Phase One Incremental Support. These shortcomings preclude many unserved consumers and states from receiving the benefits of this program because of problems with the eligibility criteria associated with the incremental support program.¹ When combined with other reforms, the March 6 Proposal, if adopted, will improve the operation of CAF Incremental Support and improve the lives of many unserved consumers.

There is another related problem with the current rules for CAF Incremental Support. Some customers today may nominally have broadband availability, but the terms and conditions associated with the service render it unable to qualify as the minimum broadband service the Commission had in mind when it adopted the test for CAF Incremental Support eligibility. The reasons for this may include inconsistent or unreliable speeds, materially restrictive usage caps,

¹ See Petition for Reconsideration of the Independent Telephone & Telecommunications Alliance, WC Docket Nos. 10-90, *et al.* (filed Dec. 29, 2011); Frontier Communications Corp. and Windstream Communications, Inc. Petition for Reconsideration and/or Clarification, WC Docket Nos. 10-90, *et al.* (filed Dec. 29, 2011).

or prices which render the service not reasonable from a consumer perspective. There should be no dispute that consumers should have the opportunity to receive the robust 4Mbps service that CAF Incremental Support would make available if they only have the option of a broadband service that, for example, substantially restrict usage.

The parties to the March 6 Proposal offer a supplement to their proposal that would help bring the benefits of CAF Incremental Support to customers that could not reasonably be deemed to be “served” pursuant to CAP Phase 1 minimum service standards. Specifically, a census block should be considered “unserved” by the provider at issue, if that provider:

- *Usage* — imposes a monthly data usage limit below 53 GB/month;
- *Download Speed* — limits sustained usage so that the 768 Kbps threshold service is not available except in inconsistent or unpredictable bursts;
- *Price* — markets its lowest speed tier service offering with 53 GB/month usage at a month-to-month price that is higher than the month-to-month price for such a service with 53 GB/month usage from any wireline provider in the state; or
- *Open Internet Order Compliance* — does not have a network management statement that complies with the Open Internet Order readily available to the public (on its website).

The evidentiary process would be the same as it is for the coverage challenges in the March 6 Proposal.

The usage allowance is derived from current usage metrics. Two recent studies support the proposition that average broadband usage per connection at the end of 2011 was approximately 24 GB per month.² It would not be reasonable, however, to restrict usage only to that of the

² Based on traffic studies, Sandvine estimated average usage at 23 GB per month in the middle of 2011. <http://www.sandvine.com/downloads/documents/10-26-2011phenomena/Sandvine%20Global%20Internet%20Phenomena%20Report%20-%20Fall%202011.pdf> (finding approx 23 GB/mo average usage in 2011). Cisco has published an estimate that is consistent — the Cisco Virtual Networking Index found average broadband usage of approximately 15 GB/mo in 2010. *Cisco Visual Networking Index: Usage Study*. (Oct 25, 2010) (available at http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/Cisco_VNI_Usage_WP.pdf). When this is updated with Cisco’s findings regarding the growth of broadband traffic, it produces an estimate of 25 GB per month in 2012. *Cisco Visual Networking Index: Forecast and Methodology, 2010-2015* (Jun 1, 2011)(available at http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/whitepaper_c11-481360.pdf (finding 32% cumulative annual growth rate for broadband usage).

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average user. For this proposal, we selected a level that likely would be sufficient for all but the top ten percent of users.³

Sincerely,

/s/ Melissa Newman

Copy via email to:

Carol Matthey
Joseph Cavender
Amy Bender
Patrick Halley

³ The usage levels of the top percentiles of users are estimated using the log-normal distribution, which is standard for communications traffic. *See, e.g.,* I Antoniou, V. Ivanov & P.V Zrelov, *On the Log-Normal Distribution of Network Traffic*, Physica D: Nonlinear Phenomena, Vol. 167, Issues 1–2, 1 July 2002, Pages 72–85; Allen B. Downey, *Lognormal and Pareto Distributions in the Internet*, 28 Computer Communications 790-801 (2005); R. Andrade, A. Lisser, N. Maculan and G. Plateau, *Telecommunication Network Capacity Design for Uncertain Demand*, 29 Computational Optimization and Applications 127-146 (2004). The use of the log-normal distribution is supported by the Cisco usage study cited above, which found that the top one percent of users accounted for twenty percent of Internet traffic, and that the top ten percent of users accounted for sixty percent of traffic. *Cisco Visual Networking Index: Usage, supra*, at 7. A lognormal distribution with a spread parameter of 1.5 matches the properties of this underlying distribution almost exactly. Assuming a constant spread, the GB per-month usage can be estimated to produce the following table:

<u>Top Percent of Users</u>	<u>Percent of Traffic</u>	<u>Ratio of Threshold Usage Level to Mean</u>	<u>Threshold GB/mo (Mean = 24 GB)</u>
1%	20%	10.7	257
2%	29%	7.1	170
3%	35%	5.5	132
4%	40%	4.5	108
5%	44%	3.8	91
6%	48%	3.3	79
7%	51%	3.0	72
8%	54%	2.7	65
9%	56%	2.4	58
10%	59%	2.2	53